

January 11th, 2016**SUMMARY OF INFORMATION COLLECTED**

During the tracking period beginning January 1, 2015 ending December 31, 2015 **2** sixteen bypasses were recorded at the wastewater treatment plant and **3** thirty seven SSO events were recorded. Included is a spreadsheet titled **3** "SSO BYPASS EVENT TRACKER" tabulating the events listed above.

**CONFIRMED I/I SOURCES**

The City had accepted bids for approximately 5,832' of 8" sewer pipe in the 2014 calendar year, most of this lining falls in the 14x the flow. This work was completed by February of 2015. Attached you will find copies of the work performed by Visu-Sewer, this includes the linear footage of pipe lined (bid packet). Also included is a map of where the work was performed. Visu-Sewer lined 5,802' of 8" sewer main and 236' of 10" sewer main. Visu-Sewer documented 18 taps were not cut out. You will find the work performed by Visu-Sewer attached labeled "Visu-Sewer CIPP 2015".

Crews have worked diligently on the replacement/addition of new services, taps, main, cleanouts and manholes. Crews replaced approximately 1,681' of sewer main/lateral, replaced thirty taps, three manholes and removed one manhole. In addition, crews also added 605' of new sewer main to our infrastructure. This new addition allowed the City to replace a 4" line that had multiple users on it and separate them to help prevent future problems. Crews replaced four taps during this time. During normal preventative maintenance crews repaired 125 cleanouts, one manhole ring, replaced a manhole and sealed two conduit coming into wet well at two different lift stations. You will find this work performed on a spreadsheet titled "I & I Sources Confirmed". **6** Crews have also completed smoke testing on **7** approximately 11,700' of main. We use this method for finding broken cleanouts, illicit discharges into the collection system and faulty mains.









We have been working on the northern sewer collection basin; when in July of 2012 we received a wet weather flow study from Olson Associates that Scotts Consulting generated. This study confirmed that the northeast section charted 14 times the normal flow. We consider this section a priority and have focused our time on that section. Our intention is to start with the highest flow increase (during rain events) and work towards the lowest. The 14x is the highest increase during saturated soils.

PREVENTIVE MAINTENANCE ACTIVITIES

Our sewer department is made up of 4.5 crew members and has been busy this year cleaning, inspecting and repairing sewer mains. The results of their labor are as follows. Included in this report is a spreadsheet titled "Jetter Report". This spreadsheet lists and describes all cleaning and inspection of sewer mains and manholes performed during the reporting period beginning January 1, 2015 ending December 31, 2015. Crews cleaned 8.95 miles of sewer main (2.49 miles of said sewer main was root sawed); video inspected 2.92 miles of sewer mains and inspected approximately 300

Summary of Comments on Annotated Annual EPA Report - 2015.pdf

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-  Number: 1 Author: WDILLARD Subject: Sticky Note Date: 1/27/2016 11:42:27 AM
Although significantly greater rainfall amounts were recorded in 2015 than in 2014, this still represented a major increase in the number of bypasses and SSOs. This suggests the corrective measures taken to date are not having the desired impact on reducing wet weather flow in the collection system, particularly since 51 of the 53 events are wet weather related.
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-  Number: 2 Author: WDILLARD Subject: Highlight Date: 1/27/2016 11:31:24 AM
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-  Number: 3 Author: WDILLARD Subject: Highlight Date: 1/27/2016 11:49:57 AM
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-  Number: 4 Author: WDILLARD Subject: Sticky Note Date: 1/27/2016 11:55:40 AM
What is the source of the rainfall data listed with the bypasses and SSOs on this spreadsheet. I have downloaded rainfall data from the four separate gauging stations in the Bolivar area (1.0 NE, 1 NE, 2.7 NE and 2.7 E) and have noted agreement with your data in some cases, but also several instances where your reported rainfall is inconsistent with that reported by the gauging stations.
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-  Number: 5 Author: WDILLARD Subject: Sticky Note Date: 2/4/2016 8:00:58 AM
It would greatly assist in reviewing your progress if a sewer system map showing the location(s) of the work described in this paragraph as completed by City crews, including smoke testing and manhole inspections, were included with the report. The locations of CIPP by contract are shown on the contract documents attached to the report.
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-  Number: 6 Author: WDILLARD Subject: Highlight Date: 1/27/2016 11:43:03 AM
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-  Number: 7 Author: WDILLARD Subject: Sticky Note Date: 1/27/2016 11:57:07 AM
The "I&I Sources Confirmed" spreadsheet lists corrective actions taken. There is no corresponding listing of defects identified by this smoke testing that are planned for future correction. Have they been corrected and included in the spreadsheet or is there a separate listing of these that is not included with this report?
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-  Number: 8 Author: WDILLARD Subject: Sticky Note Date: 1/27/2016 11:58:02 AM
How long do you anticipate completion will require? How long to complete the 14x basin and how long after that for other basins you intend to address?
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manholes during this reporting period. In Addition, we are pleased to be able to provide a better more efficient service with a new Sewer Easement Machine. You will see ordinance "3189" approving us to purchase this machine for \$52,775.

Also included is a copy of the "Daily Lift Station Report" showing run times, any maintenance preformed on each lift station and the rainfall totals when the rotors were shut off (bypasses) at the wastewater treatment plant.

1 STATUS OF POA AND CIP



The City continued its past practice of bidding out approximately \$140,000 per year on CIPP. The City has accepted CIPP bids for the 2016 year. You will find the bid packet for approximately 6,038' of lining to be completed in the 2016 year, this was put out for bids in August of 2015. In October a bid was approved by ordinance (also attached; Ordinance: 3243) and awarded to Visu-Sewer to perform work in 2016.

In the 2015 we updated an essential tool needed for tracking and mapping our infustructure and collection system. We are still working on configuring it to best fit our needs within the City. Midland GIS was awarded with the completion and hosting of our GIS.

The Waste Water Treatment Plant (WWTP) sought professional services in the 2015 calendar year. This included a new and improved bar screen as well as adding a trash compactor. The engineering services were completed by White River Associates in March of 2015, Smith and Edwards was awarded the bid in August (Ordinance-3232). Currently we are waiting for the bar screen to be built to engineers specifications. The WWTP also put bids out in November for our clarifiers to be restored and we plan to award a bid in January 2016 to install new weirs and troughs in our clarifiers.

Olsson Associates is still in the process of completing the engineering for the removal of lift station #3. This is going to be a big project, entailing a trunk line that runs through downtown Bolivar. **3 Removing the lift station will eliminate a "bottle neck" effect that we currently have in that location.** A 10" main runs into an 8" main causing this bottle neck. The Lift Station currently acts as an overflow. We plan to replace the 8" line with a 15" trunk line.



Attached is a copy of the Sewer Rate Study provided from Olsson Associates. You will find this document titled as "DNR Rate Assist Sprdsht – Bolivar".

5 VIOLATIONS









At this time we have received three "Notice of Violations" from the Southwest Regional Office of the Missouri Department of Natural Resources during the reporting period beginning January 1, 2015 ending December 31, 2015. Copies of these Violations will also be included. See below for exceedances of limitation.

May – Ammonia as N and E Coli.

June – Ammonia as N and E Coli.

July – Ammonia as N and E Coli.

	Number: 1	Author: WDILLARD	Subject: Highlight	Date: 1/27/2016 7:35:24 AM
	Number: 2	Author: WDILLARD	Subject: Sticky Note	Date: 1/27/2016 7:38:32 AM
The latest revision to the POA had post rehabilitation flow monitoring scheduled in the spring of 2015 to assess the effectiveness of the 2014 CIPP work in addressing I&I issues. This report does not contain any information regarding the conduct of that activity and the number/frequency of SSOs and bypasses reported during 2015 suggests measurable progress has not been attained.				
	Number: 3	Author: WDILLARD	Subject: Highlight	Date: 1/27/2016 7:38:59 AM
	Number: 4	Author: WDILLARD	Subject: Sticky Note	Date: 1/27/2016 7:40:50 AM
Is there an engineering evaluation available that identifies the estimated frequency and volume of overflows that result from this "bottle neck" and to what extent this project will alleviate the problem?				
	Number: 5	Author: WDILLARD	Subject: Highlight	Date: 1/27/2016 7:42:19 AM
	Number: 6	Author: WDILLARD	Subject: Sticky Note	Date: 1/27/2016 11:37:37 AM
Detailed listing of these violations has been provided to EPA by email. As previously noted, reference to NOV's from MDNR should not be the method for reporting violations that Bolivar is or should be aware of each time a monthly monitoring report is submitted.				